



**FOCUSED SITE INSPECTION PRIORITIZATION
ENCLOSURES 1 AND 2**

**ALLIED CORP EAST ST. LOUIS WORKS
ALIAS: GENERAL CHEMICAL CORPORATION-EAST SAINT LOUIS WORKS
2500 KINGS HIGHWAY
EAST SAINT LOUIS, ILLINOIS**

CERCLIS ID NO.: ILD980606974

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SITE ASSESSMENT SECTION
77 West Jackson Boulevard
Chicago, Illinois 60604**

Date Prepared: September 28, 1995
U.S. EPA Region: 5
Contract No.: 68-W0-0037
Technical Direction Document No.: T05-9506-203
Prepared by: Ecology and Environment, Inc.
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ENCLOSURE 1

**U.S. ENVIRONMENTAL PROTECTION AGENCY
RECOMMENDATION FOR
ALLIED CORP. EAST ST. LOUIS WORKS
CERCLIS ID NO.: ILD980606974**

U.S. ENVIRONMENTAL PROTECTION AGENCY RECOMMENDATION

Site Name:	Allied Corp. East St. Louis Works Alias: General Chemical-East St. Louis Works East St. Louis, St. Clair County, Illinois
CERCLIS ID No.:	ILD980606974
Report Author:	Donovan Robin Ecology and Environment, Inc. 312/663-9415
Program Leader:	Steven Skare Ecology and Environment, Inc. 312/663-9415

U.S. EPA RECOMMENDATION	SIGNATURE	DATE
"H": High priority for further site assessment	_____	_____
"L": Low priority for further site assessment	_____	_____
"D": Deferred to other authority (RCRA, TSCA, OR NRC)	_____	_____
"N": No further action	_____	_____

U.S. EPA COMMENTS:

ENCLOSURE 2

**TRANSMITTAL MEMORANDUM
WITH HRS SCORING PACKAGE
FOR
ALLIED CORP. EAST ST. LOUIS WORKS
EAST ST. LOUIS, ILLINOIS**



ecology and environment, inc.

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MEMORANDUM

DATE: September 7, 1995

TO: Sonia Vega, U.S. EPA

FROM: Donovan Robin, E & E

SUBJECT: Focused Site Inspection Prioritization (FSIP)
Site Name: Allied Corp. East St. Louis Works
Location: East St. Louis, Illinois
CERCLIS ID No.: ILD980606974

THIS DOCUMENT IS CONFIDENTIAL. Because of its predecisional nature, this memorandum and the attached preliminary Hazard Ranking System (HRS) scoresheets are not to be released to the public.

The FSIP Site Evaluation Report (SER) accompanies this transmittal memorandum and the preliminary HRS scoresheets.

The site has been evaluated to determine the need for immediate removal action as a result of a substantial threat to human health and the environment. E & E recommends the following:

- ☐ The site **does** present a threat that requires immediate removal action.
- ☒ The site **does not** present a threat that requires immediate removal action.

E & E has prepared the attached preliminary HRS site scoresheets for the above-referenced site.

- ☒ The preliminary HRS score is **below** 28.50.
- ☐ The preliminary HRS score is **above** 28.50.

The following is a summary of factors affecting the preliminary HRS pathway scores.

WASTE CHARACTERISTICS

The waste characteristics value includes the following factors: hazardous waste quantity, toxicity, and as appropriate to the pathway being evaluated, mobility, persistence, and/or bioaccumulation potential.

Two sources has been defined. The first is a 22-acre area (958,320 square feet) of contaminated soil which includes the entire southwest portion of the site currently used for chemical production. The Target Analyte List and Target Compound List (TAL/TCL) chemicals detected above background levels in soil samples collected during the 1989 E & E SSI have been entered to develop the score.

The second source is the 39-acre unlined area where alum residue has been disposed to a maximum depth of 20 feet below ground surface (1,258,400 cubic yards). A release of aluminum to groundwater was observed in this area during the 1989 SSI, and a release of manganese and iron to groundwater was observed by the Illinois Environmental Protection Agency (IEPA) in 1983. In the absence of soil sample results, the waste quantity score was developed by multiplying the highest available monitoring well results for aluminum, manganese, and iron by 1,000. Other parameters of concern observed in monitoring well samples, including high concentrations of sulfates, total suspended solids, and low pH are not included in the Superfund Chemical Data Matrix and so cannot be used to generate the waste quantity score.

GROUNDWATER MIGRATION PATHWAY

No liners or leachate collection lines have been installed in the chemical production area or in the alum residue disposal area.

An observed of aluminum, manganese, and iron to monitoring wells on-site has been entered into the PREscore program based on analytical results from the samples collected by E & E FIT during the SSI and samples collected by the site owners for IEPA. No release to drinking water wells has been observed.

The on-site production well is not known to be used as a source of drinking water. Approximately 13,000 residents who rely on residential wells and municipal wells in the study area have been entered as potential groundwater targets. The nearest residential well is located 0.1 miles north of the site.

SURFACE WATER MIGRATION PATHWAY

Runoff from the site enters Rose Creek, an intermittent stream which lies south of the site. No systems have been constructed on site to contain runoff according to information available. No soil samples have been collected from Rose Creek, and no surface water or sediment samples have been collected from Old Cahokia Creek according to available information.

The potential point of entry into Old Cahokia Creek (a perennial surface water body) has been identified at the confluence of Rose Creek with Old Cahokia Creek, which lies approximately 2.2 miles downgradient from the site. Old Cahokia Creek and Horseshoe Lake have been entered as recreational fisheries and 8.0 miles of wetland frontage have been entered as surface water targets. Flow in Old Cahokia Creek has been estimated as 10 cubic feet per second.

The majority of residents in East St. Louis area receive drinking water from the Mississippi River which is not included in the TDL.

SOIL EXPOSURE PATHWAY

Polynuclear aromatic hydrocarbons, pesticides and Aroclor 1260 were detected above background levels in surface soil samples collected from the chemical production area during the 1989 E & E SSI. Surface soil sample analytical results are not available for the former waste management area.

The chemical production area is completely fenced and has 24-hour security, and the alum residue disposal area is partially fenced, according to the 1989 E & E SSI. The nearest residence is 0.1 miles north of the site, and 28 persons work on-site according to information available. Residents within a one mile straight line radius of the perimeter of the site and on-site workers have been entered as potential targets for the soil exposure pathway. A total of approximately 5,128 persons live within one mile of the site.

The National Wetlands Inventory Map for the site has identified a total of approximately 185-acres of wetlands within one mile of the site perimeter and approximately 10-acres occurring on site. These wetland have been entered as targets and have been assigned an environmental value of 50 for being part of the Cahokia Mound State Park and of potential use to endangered and threatened species.

AIR MIGRATION PATHWAY

No air samples were collected during the SSI. Representatives of IEPA report that the facility is operating under an IEPA air quality permit No. 7302-1173 and General Chemical Corporation has no outstanding permit violations. Therefore, the air pathway has not been evaluated.

Record Information

1. Site Name: Allied Chemical Corporation
(as entered in CERCLIS)
2. Site CERCLIS Number: ILD980606974
3. Site Reviewer: Donovan Robin
4. Date: June
5. Site Location: East St. Louis, St. Clair Cty., Illinois
(City/County,State)
6. Congressional District:
7. Site Coordinates: Single
Latitude: Longitude:

Site Description

1. Setting: Suburban
2. Current Owner: Private - Industrial
3. Current Site Status: Inactive
4. Years of Operation: Inactive Site,from and to dates: 1911-1987
5. How Initially Identified: CERCLA Notification
6. Entity Responsible for Waste Generation:
 - Manufacturing
 - Inorganic Chem.
 - Agricultural Chemicals
7. Site Activities/Waste Deposition:
 - Industrial Landfill

Waste Description

8. Wastes Deposited or Detected Onsite:

- Inorganic Chemicals
- Acids/Bases
- Pesticides/Herbicides

Response Actions

9. Response/Removal Actions:

- Site Access Has Been Restricted

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- Other - Notifier

Demographic Information

11. Workers Present Onsite: Yes

12. Distance to Nearest Non-Worker Individual: > 10 Feet - 1/4 Mile

13. Residential Population Within 1 Mile: 40000.0

14. Residential Population Within 4 Miles: 100000.0

Water Use Information

15. Local Drinking Water Supply Source:

- Ground Water (within 4 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 13000.0

17. Drinking Water Supply System Type for Local Drinking
Water Supply Sources:

- Municipal (Services over 25 People)
- Private

18. Surface Water Adjacent to/Draining Site:

- Other - Ditch (Rose Creek)

PREscore 3.0 - PRESCORE.TCL File 07/25/94
HRS DOCUMENTATION RECORD
Allied Chemical Corporation - 08/30/95

PAGE: 1

1. Site Name: Allied Chemical Corporation
(as entered in CERCLIS)
2. Site CERCLIS Number: ILD980606974
3. Site Reviewer: Donovan Robin
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(City/County,State)
6. Congressional District:
7. Site Coordinates: Single

Latitude:

Longitude:

	Score
Ground Water Migration Pathway Score (Sgw)	24.11
Surface Water Migration Pathway Score (Ssw)	22.69
Soil Exposure Pathway Score (Ss)	7.20
Air Migration Pathway Score (Sa)	0.00
Site Score	16.94

NOTE

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

PREscore 3.0 - PRESCORE.TCL File 07/25/94
GROUND WATER MIGRATION PATHWAY SCORESHEET
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GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer: Unconsolidated		
1. Observed Release	550	550
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	1
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	410
3. Likelihood of Release	550	550
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+04
5. Hazardous Waste Quantity	*	100
6. Waste Characteristics	100	32
Targets		
7. Nearest Well	50	2.00E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	8.30E+01
8d. Population (lines 8a+8b+8c)	**	8.30E+0
9. Resources	5	5.00E+0
10. Wellhead Protection Area	20	5.00E+00
11. Targets (lines 7+8d+9+10)	**	1.13E+02
12. Targets (including overlaying aquifers)	**	1.13E+02
13. Aquifer Score	100	24.11
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	24.11

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release 2. Potential to Release by Overland Flow 2a. Containment 2b. Runoff 2c. Distance to Surface Water 2d. Potential to Release by Overland Flow [lines 2a(2b+2c)] 3. Potential to Release by Flood 3a. Containment (Flood) 3b. Flood Frequency 3c. Potential to Release by Flood (lines 3a x 3b) 4. Potential to Release (lines 2d+3c) 5. Likelihood of Release	550 10 25 25 500 10 50 500 500 550	0 10 1 0 10 10 25 250 260 260
Waste Characteristics		
6. Toxicity/Persistence 7. Hazardous Waste Quantity 8. Waste Characteristics	* * 100	1.00E+04 100 32
Targets		
9. Nearest Intake 10. Population 10a. Level I Concentrations 10b. Level II Concentrations 10c. Potential Contamination 10d. Population (lines 10a+10b+10c) 11. Resources 12. Targets (lines 9+10d+11)	50 ** ** ** ** 5 **	0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 5.00E+00 5.00E+00
13. DRINKING WATER THREAT SCORE	100	0.50

* Maximum value applies to waste characteristics category.
 ** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	260
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	5.00E+08
16. Hazardous Waste Quantity	*	100
17. Waste Characteristics	1000	320
Targets		
18. Food Chain Individual	50	2.00E+01
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	3.30E-03
19d. Population (lines 19a+19b+19c)	**	3.30E-03
20. Targets (lines 18+19d)	**	2.00E+01
21. HUMAN FOOD CHAIN THREAT SCORE	100	20.17

* Maximum value applies to waste characteristics category.
 ** Maximum value not applicable.

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 SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
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SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	260
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc.	*	5.00E+08
24. Hazardous Waste Quantity	*	100
25. Waste Characteristics	1000	320
Targets		
26. Sensitive Environments		
26a. Level I Concentrations	**	0.00E+00
26b. Level II Concentrations	**	0.00E+00
26c. Potential Contamination	**	2.00E+00
26d. Sensitive Environments (lines 26a+26b+26c)	**	2.00E+00
27. Targets (line 26d)	**	2.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	2.02
29. WATERSHED SCORE	100	22.69
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	22.69

* Maximum value applies to waste characteristics category.
 ** Maximum value not applicable.

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 SOIL EXPOSURE PATHWAY SCORESHEET
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SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	550
Waste Characteristics		
2. Toxicity	*	1.00E+04
3. Hazardous Waste Quantity	*	10
4. Waste Characteristics	100	18
Targets		
5. Resident Individual	50	0.00E+00
6. Resident Population		
6a. Level I Concentrations	**	0.00E+00
6b. Level II Concentrations	**	0.00E+00
6c. Resident Population (lines 6a+6b)	**	0.00E+00
7. Workers	15	5.00E+00
8. Resources	5	5.00E+00
9. Terrestrial Sensitive Environments	***	5.00E+01
10. Targets (lines 5+6c+7+8+9)	**	6.00E+01
11. RESIDENT POPULATION THREAT SCORE	**	5.94E+05

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

*** No specific maximum value applies, see HRS for details.

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 SOIL EXPOSURE PATHWAY SCORESHEET
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SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	1.00E+01
13. Area of Contamination	100	1.00E+02
14. Likelihood of Exposure	500	1.25E+02
Waste Characteristics		
15. Toxicity	*	1.00E+04
16. Hazardous Waste Quantity	*	0
17. Waste Characteristics	100	0
Targets		
18. Nearby Individual	1	1.00E+00
19. Population Within 1 Mile	**	3.50E+01
20. Targets (lines 18+19)	**	3.60E+01
21. NEARBY POPULATION THREAT SCORE	**	0.00E+00
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	7.20

* Maximum value applies to waste characteristics category.
 ** Maximum value not applicable.

AIR PATHWAY SCORESHEET

Allied Chemical Corporation - 08/30/95

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	0
2b. Particulate Potential to Release	500	0
2c. Potential to Release	500	0
3. Likelihood of Release	550	0
Waste Characteristics		
4. Toxicity/Mobility	*	0.00E+00
5. Hazardous Waste Quantity	*	0
6. Waste Characteristics	100	0
Targets		
7. Nearest Individual	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	0.00E+00
10c. Sens. Environments (lines 10a+10b)	***	0.00E+00
11. Targets (lines 7+8d+9+10c)	**	0.00E+00
AIR MIGRATION PATHWAY SCORE (Sa)	100	0.00E+00

* Maximum value applies to waste characteristics category.

** Maximum value not applicable.

*** No specific maximum value applies, see HRS for details.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Contam Soil

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Contam Soil
b. Source Type	Contaminated Soil
c. Secondary Source Type	N.A.
d. Source Vol.(yd3/gal) Source Area (ft2)	0.00 958320.00
e. Source Volume/Area Value	2.82E+01
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00
g. Data Complete?	NO
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00
i. Data Complete?	NO
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	2.82E+01

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Aldrin	< 2	NO	8.2E-01	ppm
Arsenic	< 2	NO	9.3E-01	ppm
Barium	< 2	NO	2.8E+02	ppm
Benz(a)anthracene	< 2	NO	4.0E+01	ppm
Benzo(k)fluoranthene	< 2	NO	1.8E+01	ppm
Benzofluoranthene, 3,4-	< 2	NO	4.4E+01	ppm
Chlordane	< 2	NO	9.0E-01	ppm
Chloroform	< 2	NO	4.7E-02	ppm
Chromium	< 2	NO	4.6E+01	ppm
DDD	< 2	NO	3.1E-02	ppm
DDT	< 2	NO	7.1E-02	ppm
Dieldrin	< 2	NO	1.9E+00	ppm
Endosulfan (I or II)	< 2	NO	3.9E-02	ppm
Endrin	< 2	NO	1.3E-01	ppm
Heptachlor epoxide	< 2	NO	2.6E-02	ppm
Iron	< 2	NO	5.4E+04	ppm
Lead	< 2	NO	5.2E+02	ppm
Magnesium	< 2	NO	2.9E+04	ppm
Manganese	< 2	NO	5.5E+01	ppm
Mercury	< 2	NO	2.8E+00	ppm
PCBs	< 2	NO	1.2E+00	ppm

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WASTE QUANTITY
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Vanadium	< 2	NO	1.0E+02	ppm
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WASTE QUANTITY

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1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Alum Residue area

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

WASTE QUANTITY

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2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Alum Residue area
b. Source Type	Landfill
c. Secondary Source Type	N.A.
d. Source Vol.(yd3/gal) Source Area (ft2)	1258400.00 0.00
e. Source Volume/Area Value	5.03E+02
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00
g. Data Complete?	NO
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00
i. Data Complete?	NO
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	5.03E+02

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Aluminum	< 2	NO	1.0E+06	ppm
Manganese	< 2	NO	5.5E+04	ppm

WASTE QUANTITY

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3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No. Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1 Contam Soil	GW-SW	2.82E+01	0.00E+00	2.82E+01
2 Alum Residue area	GW-SW-SE	5.03E+02	0.00E+00	5.03E+02

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values	HWQVs*	WCVs**
Ground Water	Toxicity/Mobility 1.00E+04	100	32
SW: Overland Flow, DW	Tox./Persistence 1.00E+04	100	32
SW: Overland Flow, HFC	Tox./Persis./Bioacc. 5.00E+08	100	320
SW: Overland Flow, Env	Etox./Persis./Bioacc. 5.00E+08	100	320
SW: GW to SW, DW	Tox./Persistence 1.00E+04	100	32
SW: GW to SW, HFC	Tox./Persis./Bioacc. 1.00E+05	100	56
SW: GW to SW, Env	Etox./Persis./Bioacc. 1.00E+06	100	100
Soil Exposure:Resident	Toxicity 1.00E+04	10	18
Soil Exposure: Nearby	Toxicity 1.00E+04	0	0
Air	Toxicity/Mobility 0.00E+00	0	0

* Hazardous Waste Quantity Factor Values

** Waste Characteristics Factor Category Values

Note: SW = Surface Water
GW = Ground Water
DW = Drinking Water Threat
HFC = Human Food Chain Threat
Env = Environmental Threat

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GROUND WATER PATHWAY AQUIFER SUMMARY
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No. Aquifer ID	Type	Overlaying No.	Inter- Connected with	Likelihood of Release	Targets
1 Unconsolidated	Non K	0	0	550	1.13E+02

Containment

No.	Source ID	HWQ Value	Containment Value
1	Contam Soil	2.82E+01	10
2	Alum Residue area	5.03E+02	10

=====
Containment Factor 10

Net Precipitation

Net Precipitation (inches)

3.5

Aquifer: Unconsolidated

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
1	MW1	Monitoring Well	0.000	Level I

Well

No.	Hazardous Substance	Concent.	MCL	Cancer	RFD	Units
1	Aluminum	8.7E+05	0.0E+00	0.0E+00	0.0E+00	ppb
1	Chloroform	1.6E+02	0.0E+00	5.7E+00	3.5E+02	ppb
1	Iron	4.5E+05	0.0E+00	0.0E+00	0.0E+00	ppb
1	Manganese	5.5E+04	0.0E+00	0.0E+00	1.8E+02	ppb

Observed Release Factor 550

POTENTIAL TO RELEASE

Containment

Containment Factor 10

Net Precipitation

Net Precipitation Factor 1

Depth to Aquifer

A. Depth of Hazardous Substances 20.00 feet

B. Depth to Aquifer from Surface 21.00 feet

C. Depth to Aquifer (B - A) 1.00 feet

Depth to Aquifer Factor 5

Travel Time

Are All Layers Karst? NO

Thickness of Layer(s) with Lowest Conductivity 0.00 feet

Hydraulic Conductivity (cm/sec) 1.0E-01

Travel Time Factor 35

=====

Potential to Release Factor	410
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GROUND WATER PATHWAY WASTE CHARACTERISTICS
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Source: 1 Contam Soil

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Aldrin	10000	2.00E-07	2.00E-03
Arsenic	10000	1.00E-02	1.00E+02
Barium	10000	1.00E-02	1.00E+02
Benz(a)anthracene	1000	2.00E-09	2.00E-06
Benzo(k)fluoranthene	100	2.00E-09	2.00E-07
Benzofluoranthene, 3,4-	10000	2.00E-09	2.00E-05
Chlordane	10000	2.00E-07	2.00E-03
Chloroform	100	1.00E+00	1.00E+02
Chromium	10000	1.00E-02	1.00E+02
DDD	100	2.00E-07	2.00E-05
DDT	1000	2.00E-07	2.00E-04
Dieldrin	10000	2.00E-07	2.00E-03
Endosulfan (I or II)	100	2.00E-05	2.00E-03
Endrin	10000	2.00E-03	2.00E+01
Heptachlor epoxide	10000	2.00E-03	2.00E+01
Iron	100	1.00E-02	1.00E+00
Lead	10000	2.00E-05	2.00E-01
Magnesium	100	2.00E-05	2.00E-03
Manganese	10000	1.00E-02	1.00E+02
Mercury	10000	2.00E-05	2.00E-01
PCBs	10000	2.00E-07	2.00E-03
Vanadium	100	2.00E-07	2.00E-05

PREscore 3.0 - PRESCORE.TCL File 07/25/94
GROUND WATER PATHWAY WASTE CHARACTERISTICS
Allied Chemical Corporation - 08/30/95

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Source: 2 Alum Residue area

Source Hazardous Waste Quantity Value: 503.36

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
-----	-----	-----	-----
Aluminum	100	2.00E-05	2.00E-03
Manganese	10000	1.00E-02	1.00E+02

Hazardous Substances Found in an Observed Release

Well No.	Observed Release Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
1	Aluminum	100	1.00E+00	1.00E+02
1	Chloroform	100	1.00E+00	1.00E+02
1	Iron	100	1.00E+00	1.00E+02
1	Manganese	10000	1.00E+00	1.00E+04

Toxicity/Mobility Value from Source Hazardous Substances:	1.00E+02
Toxicity/Mobility Value from Observed Release Hazardous Substances:	1.00E+04
Toxicity/Mobility Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	5.32E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population
-----	---------	-------------	---------------------	---------------------------	------------

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	25.0	1.70E+00
> 1/4 to 1/2	200.0	1.02E+01
> 1/2 to 1	200.0	5.20E+00
> 1 to 2	200.0	3.00E+00
> 2 to 3	2700.0	2.12E+01
> 3 to 4	10000.0	4.17E+01

Potential Contamination Factor:

83.000

Nearest Well

Level of Contamination: Potential
Distance in miles: 0.10

Nearest Well Factor: 2.00E+01

Resources

Resource Use: YES

Resource Factor: 5.00E+00

Wellhead Protection Area

There is a designated wellhead protection area

Wellhead Protection Area Factor: 5.00E+00

PREscore 3.0 - PRESCORE.TCL File 07/25/94
SURFACE WATER PATHWAY SEGMENT SUMMARY
Allied Chemical Corporation - 08/30/95

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No.	Segment ID	Segment Type	Water Type	Start Point (mi)	End Point (mi)	Average Flow (cfs)
1	Old Cahokia	River	Fresh	0.00	2.00	10
2	Hoseshoe Lake	Lake	Fresh	2.00	15.00	1

OBSERVED RELEASE

No. Sample ID	Sample Type	Distance (miles)	Level of Contamination		
			DW	HFC	Env

- N/A and/or data not specified					

=====

Observed Release Factor	0
-------------------------	---

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

No.	Source ID	HWQ Value	Containment Value
1	Contam Soil	2.82E+01	10
2	Alum Residue area	5.03E+02	10

=====
Containment Factor: 10

Distance to Surface Water

Distance to Surface Water: 12000.0 feet

Distance to Surface Water Factor: 0

Runoff

A. Drainage Area: 100.0 acres

B. 2-year, 24-hour Rainfall: 2.5 inches

C. Soil Group: A
Coarse-textured soils with high infiltration rates

Runoff Factor: 1

=====

Potential to Release by Overland Flow Factor: 10

Potential to Release by Flood

No.	Source ID	HWQ Value	Flood Containment Value	Flood Frequency Value	Potential to Release by Flood
1	Contam Soil	2.82E+01	10	25	250

=====

Potential to Release by Flood Factor: 250

Source: 1 Contam Soil

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
-----	-----	-----	-----
Aldrin	10000	1.00E+00	1.00E+04
Arsenic	10000	1.00E+00	1.00E+04
Barium	10000	1.00E+00	1.00E+04
Benz(a)anthracene	1000	1.00E+00	1.00E+03
Benzo(k)fluoranthene	0	1.00E+00	0.00E+00
Benzofluoranthene, 3,4-	10000	1.00E+00	1.00E+04
Chlordane	10000	1.00E+00	1.00E+04
Chloroform	100	4.00E-01	4.00E+01
Chromium	10000	1.00E+00	1.00E+04
DDD	100	1.00E+00	1.00E+02
DDT	1000	1.00E+00	1.00E+03
Diieldrin	10000	1.00E+00	1.00E+04
Endosulfan (I or II)	100	1.00E+00	1.00E+02
Endrin	10000	1.00E+00	1.00E+04
Heptachlor epoxide	10000	1.00E+00	1.00E+04
Iron	0	1.00E+00	0.00E+00
Lead	10000	1.00E+00	1.00E+04
Magnesium	0	1.00E+00	0.00E+00
Manganese	10000	1.00E+00	1.00E+04
Mercury	10000	1.00E+00	1.00E+04
PCBs	10000	1.00E+00	1.00E+04
Vanadium	100	1.00E+00	1.00E+02

Source: 2 Alum Residue area

Source Hazardous Waste Quantity Value: 503.36

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
-----	-----	-----	-----
Aluminum	0	1.00E+00	0.00E+00
Manganese	10000	1.00E+00	1.00E+04

Hazardous Substances Found in an Observed Release

Sample Observed Release No.	Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
--------------------------------	---------------------	-------------------	----------------------	-----------------------------------

- N/A and/or data not specified

Toxicity/Persistence Value from Source Hazardous Substances:	1.00E+04
Toxicity/Persistence Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	5.32E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
--------	--	------------

- N/A and/or data not specified

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population

- N/A and/or data not specified		

=====

Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served

- N/A and/or data not specified		

Type of Surface Water Body	Total Population	Dilution-Weighted Population

- N/A and/or data not specified		

=====

Dilution-Weighted Population Served by Potentially Contaminated Intakes:	0.0
---	-----

Potential Contamination Factor:	0.0
---------------------------------	-----

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: YES

Resource Value: 5.00E+00

Source: 1 Contam Soil

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Toxicity Value	Persistence Value	Bio- accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Aldrin	10000	1.00E+00	5.00E+01	5.00E+05
Aluminum	0	1.00E+00	5.00E+01	0.00E+00
Arsenic	10000	1.00E+00	5.00E+00	5.00E+04
Barium	10000	1.00E+00	5.00E-01	5.00E+03
Benz(a)anthracene	1000	1.00E+00	5.00E+04	5.00E+07
Benzo(k)fluoranthene	0	1.00E+00	5.00E+04	0.00E+00
Benzo(a)fluoranthene, 3,4-	10000	1.00E+00	5.00E+04	5.00E+08
Chlordane	10000	1.00E+00	5.00E+04	5.00E+08
Chloroform	100	4.00E-01	5.00E+00	2.00E+02
Chromium	10000	1.00E+00	5.00E+00	5.00E+04
DDD	100	1.00E+00	5.00E+04	5.00E+06
DDT	1000	1.00E+00	5.00E+04	5.00E+07
Dieldrin	10000	1.00E+00	5.00E+04	5.00E+08
Endosulfan (I or II)	100	1.00E+00	5.00E+03	5.00E+05
Endrin	10000	1.00E+00	5.00E+03	5.00E+07
Heptachlor epoxide	10000	1.00E+00	5.00E+00	5.00E+04
Iron	0	1.00E+00	5.00E-01	0.00E+00
Lead	10000	1.00E+00	5.00E+01	5.00E+05
Magnesium	0	1.00E+00	5.00E-01	0.00E+00
Manganese	10000	1.00E+00	5.00E-01	5.00E+03
Mercury	10000	1.00E+00	5.00E+04	5.00E+08
PCBs	10000	1.00E+00	5.00E+04	5.00E+08
Vanadium	100	1.00E+00	5.00E-01	5.00E+01

Source: 2 Alum Residue area

Source Hazardous Waste Quantity Value: 503.36

Hazardous Substance	Toxicity Value	Persistence Value	Bio- accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Aluminum	0	1.00E+00	5.00E+01	0.00E+00
Manganese	10000	1.00E+00	5.00E-01	5.00E+03

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Bio- accum. Value	Toxicity/ Persistence/ Bioaccum. Value
------------	---	-------------------	----------------------	-------------------------	---

- N/A and/or data not specified

Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	5.32E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value

- N/A and/or data not specified		

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value

- N/A and/or data not specified		

=====

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Fishery	Annual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
1 Old Cahokia	1.0	River	10	0.0	1.00E-01	3.00E-03
2 Hoseshoe Lake	1.0	Lake	1	0.0	1.00E+00	3.00E-02

Sum of (Pi*Di): 3.30E-02

Potential Human Food Chain Contamination Factor: 3.30E-03

Food Chain Individual

Location of Nearest Fishery: Hoseshoe Lake
 Distance from the Probable Point of Entry: 2.00 miles
 Type of Surface Water Body: Lake
 Dilution Weight: 1.0000000
 Level of Contamination: Potential

Food Chain Individual Factor: 20.00

Source: 1 Contam Soil

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Aldrin	10000	1.00E+00	5.00E+04	5.00E+08
Aluminum	0	1.00E+00	5.00E+01	0.00E+00
Arsenic	10	1.00E+00	5.00E+01	5.00E+02
Barium	1	1.00E+00	5.00E-01	5.00E-01
Benz(a)anthracene	10000	1.00E+00	5.00E+04	5.00E+08
Benzo(k)fluoranthene	0	1.00E+00	5.00E+04	0.00E+00
Benzofluoranthene, 3,4-	0	1.00E+00	5.00E+04	0.00E+00
Chlordane	10000	1.00E+00	5.00E+04	5.00E+08
Chloroform	10	4.00E-01	5.00E+00	2.00E+01
Chromium	10000	1.00E+00	5.00E+00	5.00E+04
DDD	10000	1.00E+00	5.00E+04	5.00E+08
DDT	10000	1.00E+00	5.00E+04	5.00E+08
Dieldrin	10000	1.00E+00	5.00E+04	5.00E+08
Endosulfan (I or II)	10000	1.00E+00	5.00E+03	5.00E+07
Endrin	10000	1.00E+00	5.00E+04	5.00E+08
Heptachlor epoxide	10000	1.00E+00	5.00E+04	5.00E+08
Iron	10	1.00E+00	5.00E-01	5.00E+00
Lead	1000	1.00E+00	5.00E+03	5.00E+06
Magnesium	0	1.00E+00	5.00E-01	0.00E+00
Manganese	0	1.00E+00	5.00E+04	0.00E+00
Mercury	10000	1.00E+00	5.00E+04	5.00E+08
PCBs	10000	1.00E+00	5.00E+04	5.00E+08
Vanadium	0	1.00E+00	5.00E-01	0.00E+00

Source: 2 Alum Residue area

Source Hazardous Waste Quantity Value: 503.36

Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Aluminum	0	1.00E+00	5.00E+01	0.00E+00
Manganese	0	1.00E+00	5.00E+04	0.00E+00

Hazardous Substances Found in an Observed Release

Sample Observed Release No. Hazardous Substance	Eco- toxicity Value	Persistence Value	Bio- accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
--	---------------------------	----------------------	-------------------------	--

- N/A and/or data not specified

Ecotoxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Ecotoxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Ecotoxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	5.32E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
-----------------------	---	-----------------------------------

- N/A and/or data not specified

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
---------	--	------------------------------

- N/A and/or data not specified

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value

- N/A and/or data not specified		

 Sum of Sensitive Environments Values:

0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)

- N/A and/or data not specified		

 Total Wetlands Frontage:

0.00 Miles

Total Wetlands Value: 0

=====

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Sensitive Environments

Type of Surface		Sensitive Environment
Water Body	Sensitive Environment	Value

Wetlands

Type of Surface		Wetlands	Wetlands
Water Body	Sensitive Environment	Frontage	Value

- N/A and/or data not specified

Type of Surface	Sum of Sens. Environment Values(Sj)	Sum of Wetland Frontage Values(Wj)	Dilution Weight (Dj)	Dj(Wj+Sj)
Water Body				
----- - N/A and/or data not specified				

Sum of Dj(Wj+Sj): 0.00E+00
 Sum of Dj(Wj+Sj)/10: 0.00E+00

=====
 Potential Contamination Sensitive Environment Factor: 2.00E+00

Likelihood of Exposure

No.	Source ID	Level of Contamination
1	Contam Soil	Level I
2	Alum Residue area	Level I

Likelihood of Exposure Factor: 550		

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
1	Aldrin	< 2	8.2E-01	3.4E-02	1.7E+01	ppm
1	Arsenic	< 2	9.3E-01	3.3E-01	1.7E+02	ppm
1	Barium	< 2	2.8E+02	0.0E+00	4.1E+04	ppm
1	Benz(a)anthracene	< 2	4.0E+01	0.0E+00	0.0E+00	ppm
1	Benzo(k)fluoranthene	< 2	1.8E+01	0.0E+00	0.0E+00	ppm
1	Benzofluoranthene, 3,4-	< 2	4.4E+01	0.0E+00	0.0E+00	ppm
1	Chlordane	< 2	9.0E-01	4.5E-01	3.5E+01	ppm
1	Chloroform	< 2	4.7E-02	9.6E+01	5.8E+03	ppm
1	Chromium	< 2	4.6E+01	0.0E+00	2.9E+03	ppm
1	DDD	< 2	3.1E-02	2.4E+00	0.0E+00	ppm
1	DDT	< 2	7.1E-02	1.7E+00	2.9E+02	ppm
1	Dieldrin	< 2	1.9E+00	3.6E-02	2.9E+01	ppm
1	Endosulfan (I or II)	< 2	3.9E-02	0.0E+00	3.5E+03	ppm
1	Endrin	< 2	1.3E-01	0.0E+00	1.7E+02	ppm
1	Heptachlor epoxide	< 2	2.6E-02	6.4E-02	7.6E+00	ppm
1	Iron	< 2	5.4E+04	0.0E+00	0.0E+00	ppm
1	Lead	< 2	5.2E+02	0.0E+00	0.0E+00	ppm
1	Magnesium	< 2	2.9E+04	0.0E+00	0.0E+00	ppm
1	Manganese	< 2	5.5E+01	0.0E+00	2.9E+03	ppm
1	Mercury	< 2	2.8E+00	0.0E+00	1.7E+02	ppm
1	PCBs	< 2	1.2E+00	7.6E-02	0.0E+00	ppm
1	Vanadium	< 2	1.0E+02	0.0E+00	4.1E+03	ppm
2	Aluminum	< 2	1.0E+06	0.0E+00	0.0E+00	ppm
2	Manganese	< 2	5.5E+04	0.0E+00	2.9E+03	ppm

Source: 1 Contam Soil

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Toxicity Value
Aldrin	10000
Arsenic	10000
Barium	10000
Benz(a)anthracene	1000
Benzo(k)fluoranthene	0
Benzofluoranthene, 3,4-	10000
Chlordane	10000
Chloroform	100
Chromium	10000
DDD	100
DDT	1000
Dieldrin	10000
Endosulfan (I or II)	100
Endrin	10000
Heptachlor epoxide	10000
Iron	0
Lead	10000
Magnesium	0
Manganese	10000
Mercury	10000
PCBs	10000
Vanadium	100

Source: 2 Alum Residue area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
------------------------	-------------------

Aluminum	0
Manganese	10000

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.82E+01
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

Targets

Level I Population:	0.0	Value:	0.00
Level II Population:	0.0	Value:	0.00
Workers:	28.0	Value:	5.00
Resident Individual:	Potentia	Value:	0.00
Resources:	YES	Value:	5.00

Terrestrial Sensitive Environment	Value
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Cahokia Mnd Ste Prk	40
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On-Site Wetlands	10
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=====

Terrestrial Sensitive Environments Factor: 50.00

Likelihood of Exposure

No.	Source ID	Level of Contamination	Attractiveness/ Accessibility	Area of Contam. (sq. feet)
2	Alum Residue area	Level I	10	2178000

Highest Attractiveness/Accessibility Value:			10	
Sum of Eligible Areas Of Contamination (sq. feet):				2178000
Area of Contamination Value: 100				

Likelihood of Exposure Factor Category: 125

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
2	Aluminum	< 2	1.0E+06	0.0E+00	0.0E+00	ppm
2	Manganese	< 2	5.5E+04	0.0E+00	2.9E+03	ppm

Source: 1 Contam Soil

Source Hazardous Waste Quantity Value: 28.19

Hazardous Substance	Toxicity Value
Aldrin	10000
Arsenic	10000
Barium	10000
Benz(a)anthracene	1000
Benzo(k)fluoranthene	0
Benzofluoranthene, 3,4-	10000
Chlordane	10000
Chloroform	100
Chromium	10000
DDD	100
DDT	1000
Dieldrin	10000
Endosulfan (I or II)	100
Endrin	10000
Heptachlor epoxide	10000
Iron	0
Lead	10000
Magnesium	0
Manganese	10000
Mercury	10000
PCBs	10000
Vanadium	100

Source: 2 Alum Residue area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
------------------------	-------------------

Aluminum	0
Manganese	10000

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0
Waste Characteristics Factor Category:	0

Nearby Individual

Population within 1/4 mile: 600.0

Nearby Individual Value: 1.0

Population Within 1 Mile

Travel Distance Category	Number of People	Value
> 0 to 1/4 mile	600.0	1.3
> 1/4 to 1/2 mile	1000.0	0.7
> 1/2 to 1 mile	35000.0	32.6

Population Within 1 Mile Factor: 35.0

Gas Migration Potential

GAS POTENTIAL TO RELEASE

Source ID	Source Type	Gas	Gas	Gas	Sum (B+C)	Gas
		Contain. Value (A)	Source Type Value (B)	Migrtn. Potent. Value (C)		Potential to Rel. Value A(B+C)

- N/A and/or data not specified

Gas Potential to Release Factor:

0

OBSERVED RELEASE

No. Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified		

=====

Observed Release Factor: 0

Source: Alum Residue area

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
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Average of Gas Migration Potential Value for 3 Hazardous Substances: 0.000
=====

Gas Migration Potential Value From Table 6-7: 0

Source: Contam Soil

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Aldrin	11
Benz(a)anthracene	6
Benzo(k)fluoranthene	6
Benzofluoranthene, 3,4-	6
Chlordane	6
Chloroform	17
DDD	6
DDT	6
Dieldrin	6
Endosulfan (I or II)	11
Endrin	6
Heptachlor epoxide	11
Mercury	11
PCBs	11

Average of Gas Migration Potential Value for 3 Hazardous Substances: 13.000

Gas Migration Potential Value From Table 6-7: 11

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

Source ID	Source Type	Partic.	Partic.	Partic.	Sum	Partic.
		Contain.	Source	Migrtn.		Potential
		Value	Type	Potent.		to Rel.
		(A)	(B)	(C)	(B+C)	A(B+C)

- N/A and/or data not specified						

Particulate Potential to Release Factor: 0

Source: Contam Soil

Particulate Hazardous Substance

Aldrin
Arsenic
Barium
Benz(a)anthracene
Benzo(k)fluoranthene
Benzofluoranthene, 3,4-
Chlordane
Chromium
DDD
DDT
Dieldrin
Endosulfan (I or II)
Endrin
Heptachlor epoxide
Iron
Lead
Magnesium
Manganese
Mercury
PCBs
Vanadium

Source: Alum Residue area

Particulate Hazardous Substance

Aluminum

Manganese

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AIR PATHWAY WASTE CHARACTERISTICS
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Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value

Hazardous Substances Found in an Observed Release

Sample Observed Release ID Hazardous Substance	Particulate Toxicity/ Mobility Value	Gas Toxicity/ Mobility Value
---	--	------------------------------------

- N/A and/or data not specified

- N/A and/or data not specified

Toxicity/Mobility Value from Observed Release Hazardous
Substances:

0.00E+00

Toxicity/Mobility Factor:

0.00E+00

Sum of Source Hazardous Waste Quantity Values:

0.00E+00

Hazardous Waste Quantity Factor:

0

Waste Characteristics Factor Category:

0

AIR PATHWAY TARGETS

Allied Chemical Corporation - 08/30/95

Actual Contamination

No. Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified		

Potential Contamination

Distance Categories Subject to Potential Contamination	Population	Value

Potential Contaminantion Factor:		0.0000
Potential Contaminantion Factor:		0.0000
Potential Contaminantion Factor:		0.0000
Potential Contaminantion Factor:		0.0000
Potential Contaminantion Factor:		0.0000
Potential Contaminantion Factor:		0.0000
Potential Contaminantion Factor:		0.0000

doc here

Nearest Individual Factor

Distance in miles: Potentia

- N/A and/or data not specified

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Resources

Resource Value: 4.93538669774779744000000000000000000000000e+257

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Actual Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value

- N/A and/or data not specified		

Actual Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value

- N/A and/or data not specified		

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(Sum of Sensitive Environments + Wetlands Values)

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REFERENCES
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